



**MALIBU
TOPANGA
SMART**

Save water. Live well.

Malibu and Topanga Smart Project

Proposition 84 IRWM Implementation Grant

Project 6 - Comprehensive Water
Conservation Project





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PROJECT OVERVIEW

The City of Malibu, West Basin Municipal Water District, and Los Angeles County Waterworks District 29 (Project partners) received a \$1.05 Million Prop 84 grant (Number 4600011488) award to reduce water use by 87.4 acre-feet (AF) per year (1,174.5 lifetime AF) in the City of Malibu and the LA County Unincorporated area of Topanga through the installation of water-saving measures in the highest use residences.

The Comprehensive Water Conservation Project, designed at the height of California's 2011-2016 drought, was intended to provide a wide range of resources such as rebates, educational classes, indoor/outdoor surveys, smart water meter installations, and consultations.

The Project's original design targeted the top 500 residential water users offering water efficiency measures focused most heavily on indoor measures as well as turf replacement.

PROJECT SUMMARY

Water Savings Goal

87.4 AFY

1,174.5 Lifetime AF

Actual Water Savings

96.6 AF per Year

1,808.2 Actual Lifetime AF

111% of Goal

Original Funding

\$1,539,260

Actual Funds Expended

*(Due to Project Additions
for Smart Meters)*

\$2,107,941

PROJECT DEVELOPMENT

As part of the Project development, the Project team conducted surveys of residents, businesses, and community leaders to determine the best approach to achieving the water savings goal. Additionally, Project staff “walked” targeted sites, viewed aerial property photos, and examined customer data.

The development activities elucidated a number of site characteristics and customer mindsets unique to this homeowner class:

- The highest water use customers have multi-million dollar homes with expansive outdoor acreage and nearly all of it is professionally landscaped, at high expense.
- Most of these owners are not interested in removing their lush rose gardens and lawns. Due to this, turf removal has a lower customer response under the Project.
- Despite highly groomed landscape areas, the preponderance of irrigation systems operate with miss-matched and malfunctioning sprinkler heads and low technology controllers.
- Landscape and lawn areas are immense, and it is evident that the highest water savings opportunities exist with outdoor measures.

The team came to understand that the original Project design missed the primary water savings opportunity—that being irrigation measures. For that reason, changes to the Project were required.





PROJECT MODIFICATIONS

In 2018, The City of Malibu, West Basin Municipal Water District, and Los Angeles County Waterworks District 29 requested and received approval from the Department of Water Resources of the following modifications to the Comprehensive Water Conservation Project:



1. Shift Project focus to “smart irrigation” and offer customers a package of the most innovative, proven irrigation technologies available to this market.
2. Reduce the number of turf removal rebates.
3. Eliminate the indoor measures that will not be well accepted by this target group.
4. Retain the indoor measures that are relevant to this target customer.



The newly branded Malibu Smart Topanga Smart Project was tailored specifically for the highest water use residents of Malibu and Topanga Canyon and was uniquely designed to offer robust, step-by-step customer guidance and services.

The Project provided extensive customer support with Project staff conducting a site visit to each interested resident’s home. This allowed the Project staff person to precisely identify ways for the property owner, Estate Manager or Landscape Service Provider to significantly reduce outdoor water usage.

The redesign of the Project also included payment of the incentives directly to landscape contractors for the smart irrigation measures. Many customers rely upon their landscape contractor as a trusted advisor and engaging this group was seen as an effective way to promote the Project and increase response.

PROJECT OPERATIONS

The redesigned Malibu and Topanga Smart Project launched in July 2018, targeting the top 500 highest water users.

Two marketing outreach strategies were implemented simultaneously that supported the overall message of smart water conservation.



1. Overall messaging targeted generally to area residents focused on the new water savings technologies and ways customers can make their homes and yards water smart.
2. Project staff conducted direct outreach to the top 500 water users. Among the top 500 users, three major categories were used to classify customers based on their motivations:
 - **Firsts:** early adopters of technology
 - **Heroes:** socially responsible, environmentalist
 - **Investors:** concerned with investment in their home and value

Large landscape customers often require contractor services to perform irrigation and landscape efficiency upgrades, so Project staff conducted outreach to local landscape contractors to enroll them in the Project. Through these efforts, eleven contractors were enrolled as Qualified Project Contractors. Staff met with each contractor to prioritize customer outreach. Throughout the Project, Staff routinely met with contractors to review leads and assist in project development and incentive application completion.

As stated, the outreach team contacted the top 500 water users, predominantly through phone calls and emails.

Site assessments were then conducted for interested customers to develop a site-specific smart irrigation plan for their property.

The team, as appropriate, connected the customer to an approved contractor, supported the customer through installation process.

Eighty-eight site visits were conducted from the start of the Project until the beginning of November 2018. Twenty-four projects were in process and momentum was gaining when a major event impacted operations.



Project Suspension

In early November 2018, Project operations came to a halt when the Woolsey Fire reached Malibu causing a mandatory evacuation.

At this time, the team ceased all outreach activities out of consideration for the community. Operations did not resume until Spring 2019.



PROJECT RELAUNCH

In March 2019, the Project was relaunched utilizing the theme of *Rebuild. Save Water. Protect Your Home.*



INCREASED REBATE EFFECTIVE JULY 1
\$5 PER SQ FT
LAND REPLACEMENT

Rebuild. Save Water. Protect Your Home.
There are discounts for water-saving products and services available through 2019, for all residents, including landscaping that was damaged or destroyed by the fire.

Firescaping uses smart landscaping techniques and native plants to **protect your home from wildfires**. These practices combined with smart irrigation systems can help you safeguard your investment, use less water and save money on your water bill. Firescaping and water-saving resources available at malibusmart.org.

By installing **smart**, water-saving technologies, you can **help the community save 28 million gallons of water annually**. **APPROVED CONTRACTORS** are ready and able to help. For a list, go to malibusmart.org.

ACT NOW!
Smart Irrigation Packages Rebates
Combine some or all of these technologies to get the most water savings and a greater rebate. **Rebates available for a limited time.** Qualified homes in Malibu can get up to **\$10,000 in rebates** for installing a Smart Irrigation Package. Call 310-554-6210 or email water@malibusmart.org to get more information and schedule a consultation. Restrictions apply. Some restrictions lifted for those impacted by the Woolsey fire.

\$350 PER UNIT MASTER VALVE AND FLOW SENSOR	\$35 PER STATION SMART CLOUD-BASED IRRIGATION CONTROLLER	.25¢ PER GPM DIP IRRIGATION SYSTEM	\$9 PER UNIT PRESSURE REGULATING SPRAY HEADS AND CHECK VALVES	\$6 PER HOZZLE HIGH-EFFICIENCY SPRINKLER HOZZLE
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Malibu Smart 



FIND OUT WHICH LANDSCAPES ARE HIGH FIRE RISK AND WHY

FREE

Firescaping Workshop

SAVE THE DATE

Firescaping uses smart landscaping techniques and native plants to **protect your home from wildfires**. These practices combined with smart irrigation systems can help safeguard your home, use less water and **save money on your water bill**.

Please join us at a **FREE** workshop to:

- Identify high-risk landscapes
- Learn which plants and building materials help minimize damage
- Get tips for reducing your fire risk
- Make your home more fire-damage resistant

Wednesday, August 21, 2019 5:30 PM - 7:30 PM @ **TOPANGA LIBRARY**
127 N Topanga Canyon Blvd, Topanga, CA 90260

Rebuild. Save Water. Protect Your Home.

\$5 PER SQ FT
LAND REPLACEMENT

QUALIFIED CONTRACTORS are ready and available for hire. For a list, go to topangasmart.org.



The relaunch included a series of Firescaping workshops. *Firescaping uses smart landscaping techniques and native plants to protect homes from wildfires. These practices, combined with smart irrigation systems, can help safeguard home while using less water.*

At this time the target customer group was increased from the top 500 to the top 1,000 water users.

The Project relaunch also included utilization of a prominent and well-respected community member- former Malibu Mayor, Laura Rosenthal- to conduct outreach. Project staff, alongside Ms. Rosenthal, met with dozens of customers.

Over the course of the next year, response increased, and dozens of projects were implemented. From these projects, four of them were selected to be used as Project case studies. With support of the homeowners, the case study projects were featured in promotional materials and outreach activities.



The Clarfields Saved a Whopping 385,000 Gallons of Water a Year

Simple Fixes Resulted in 38% Off the Clarfield's Water Bill

"The assessment Malibu Smart provided was super helpful. Recommendations were simple and straightforward. Landscape is doing great and our trees are all doing well. Everything is thriving, even with no rain. The only thing we would do different is do it sooner." — The Clarfields

When Mitch and Chris Clarfield got a call from **MALIBU SMART** about reducing water use at their property, they said "Yes, help us." So, we did.

One of our **MALIBU SMART** certified consultants went out to the Clarfield property - a challenging site to water due to significant slopes, multiple levels, a great variety of trees and plants, and various types of irrigation equipment. The consultant provided the Clarfields with easy-to-implement recommendations.

Shortly thereafter, the **MALIBU SMART** team worked directly with Mitch and his gardener to put the plan into action including:

- Fixing numerous broken sprinkler heads
- Installing high efficiency sprinkler nozzles
- Installing smart irrigation timers



MALIBU SMART offers extensive rebates to customers who install high efficiency sprinklers or replace their lawns.

For more information and to schedule an assessment, please call 310-554-6210 or visit www.malibusmart.org.

Customer Options

OPTION 1

Take advantage of **FREE** high efficiency sprinkler nozzles with **FREE** installation. It's quick, easy, and—as we said—**FREE!**

OPTION 2

For larger properties, take advantage of **generous incentives** for comprehensive sprinkler system upgrades. Get the newest technology and **see significant savings** all with a quick payback.

OPTION 3

Replace your lawn with climate appropriate plants and efficient irrigation. Get **\$5 per square foot back** while your landscape becomes drought and fire resilient.



The O'Bryans Installed a New High Efficiency Sprinkler System and Reduced Their Water Bill by 25%!

Even better, the investment had a payback of less than one month.

"Participation was seamless. MALIBU SMART was timely and professional. Now the system automatically adjusts the watering based on local weather, including wind or rain events. - the new technology is working great. We've been able to keep our lawn and it looks better than ever." — The O'Bryans

Conserving water is important to Duros and Cyndi O'Bryan, but they didn't know how to go about it. What's more, they entertain outdoors regularly, so they wanted to keep their grass intact. Not to worry. By installing a new high efficiency irrigation system and smart timers, the O'Bryans have cut their water usage by 50% and they still have their full lawn.

The O'Bryans invited the **MALIBU SMART** team out to their home to assess the property and make recommendations for conserving water. It was an easy decision to move forward. The payback was attractive and the process was straightforward. They scheduled program contractor Valley Soil to come to their property and install:

- New pressure regulating sprinkler heads
- New high efficiency sprinkler nozzles
- New smart irrigation timers



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With Generous Rebates, The Sarmientos Completely Transformed Their Landscape

“The MALIBU SMART Folks Did the Assessment, Installed the New Sprinkler Nozzles, Coordinated the Landscape Contractor and Did All the Paperwork. The Program is So Easy.”

“By making the recommended changes, we were able to transform our damaged landscape and make our whole property more inviting to family and friends.” — The Sarmientos

Ellen and Cesar Sarmiento didn't hold back when they heard about the **MALIBU SMART** program. From high efficiency sprinklers to lawn replacement, they said yes to it all. And, after their landscape had burned in the Woosley Fire, the program helped them create a more inviting landscape that will help protect their property from fire damage in the future.



- Removed 6,400+ square feet of grass and replaced with native landscaping and fruit trees
- Installed new sprinkler heads, nozzles & drip irrigation
- Installed new smart irrigation timer
- Installed 100 gallon rain barrel

MALIBU SMART offers extensive rebates to customers who install high efficiency sprinklers or replace their lawns.

For more information and to schedule an assessment, please call 310-554-6210 or visit www.malibusmart.org.

Customer Options

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- OPTION 2**
For larger properties, take advantage of **generous incentives** for comprehensive sprinkler system upgrades. Get the newest technology and **see significant savings** all with a quick payback.
- OPTION 3**
Replace your lawn with climate appropriate plants and efficient irrigation. Get **\$5 per square foot back** while your landscape becomes drought and fire resilient.



Steven Sindell Installed a New High Efficiency Sprinkler System and Reduced His Water Bill by 65%!

Steven Sindell knew he was using too much water, but he didn't know how much or what to do about it. Before, his lawn was either over or under watered – today the property looks great.

“I'm so glad I did it. It was worth the small investment, and now I can better manage my water use. I don't have one complaint - it was easy.” — Steven Sindell

Steven Sindell was happy when **MALIBU SMART** came out to his home, did a free assessment, and helped him put a plan into action that would conserve water, while improving the look of his property and saving money each month.

Steven says all he had to do was coordinate appointment times and now, his lawn has never looked better. Program Contractor, Valley Soil, installed:

- New pressure regulating sprinkler heads
- New high efficiency sprinkler nozzles
- New smart irrigation timers



MALIBU SMART offers extensive rebates to customers who install high efficiency sprinklers or replace their lawns.

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Replace your lawn with climate appropriate plants and efficient irrigation. Get **\$5 per square foot back** while your landscape becomes drought and fire resilient.





COVID-19 PANDEMIC

In March 2020, that yet another major event impacted operations and caused modifications in Project procedures—the **COVID pandemic**.

All activities involving in-person meetings and community events were permanently suspended including:

- In-home meetings with customers to review their water use and savings opportunities.
- On-site home water use surveys to evaluate indoor and outdoor water use.
- On-site landscape and irrigation system evaluations.
- Installation of high-efficiency sprinkler nozzles at customer homes.
- Pre-installation inspection of customer properties to determine Project eligibility.
- Post-installation inspections of customer properties to ensure water savings equipment was installed.
- Educational classes & workshops for California Friendly Landscaping, Turf Removal, and Firescaping.
- Rain Barrel distribution events.

The suspension of activities delayed implementation of customer projects and required an extension of the grant agreement. DWR approved an extension through December 2024.





Second Project Relaunch

In the summer of 2020, the project was relaunched once again. An extensive email and social media campaign was launched to promote the Project to all Malibu and Topanga residents. The campaign:

- Focused on outdoor living.
- Targeted three categories believed to be of the most interest to customers – smart controllers, turf replacement, and general rebates.
- Highlighted the increased smart controller and turf replacement rebate amounts.
- Provided more visual ads and videos.
- Promoted the case studies.

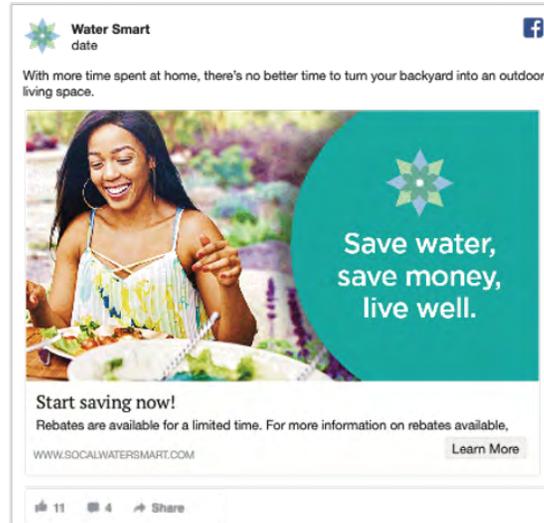
The outreach methods included three primary approaches:

1. Direct mail postcards



Upgrade Your Sprinkler Timer and Get a Rebate!

2. Social media ads for Facebook, NextDoor, and Instagram



3. Emails



In December 2021, face-to-face customer site visits were still suspended but Project staff was looking to maximize participation. To boost participation the Project began offering the direct installation of smart irrigation controllers through project contractors.

PROJECT BENEFITS

Goal success was achieved despite the challenges of the Woolsey Fire and the COVID pandemic.

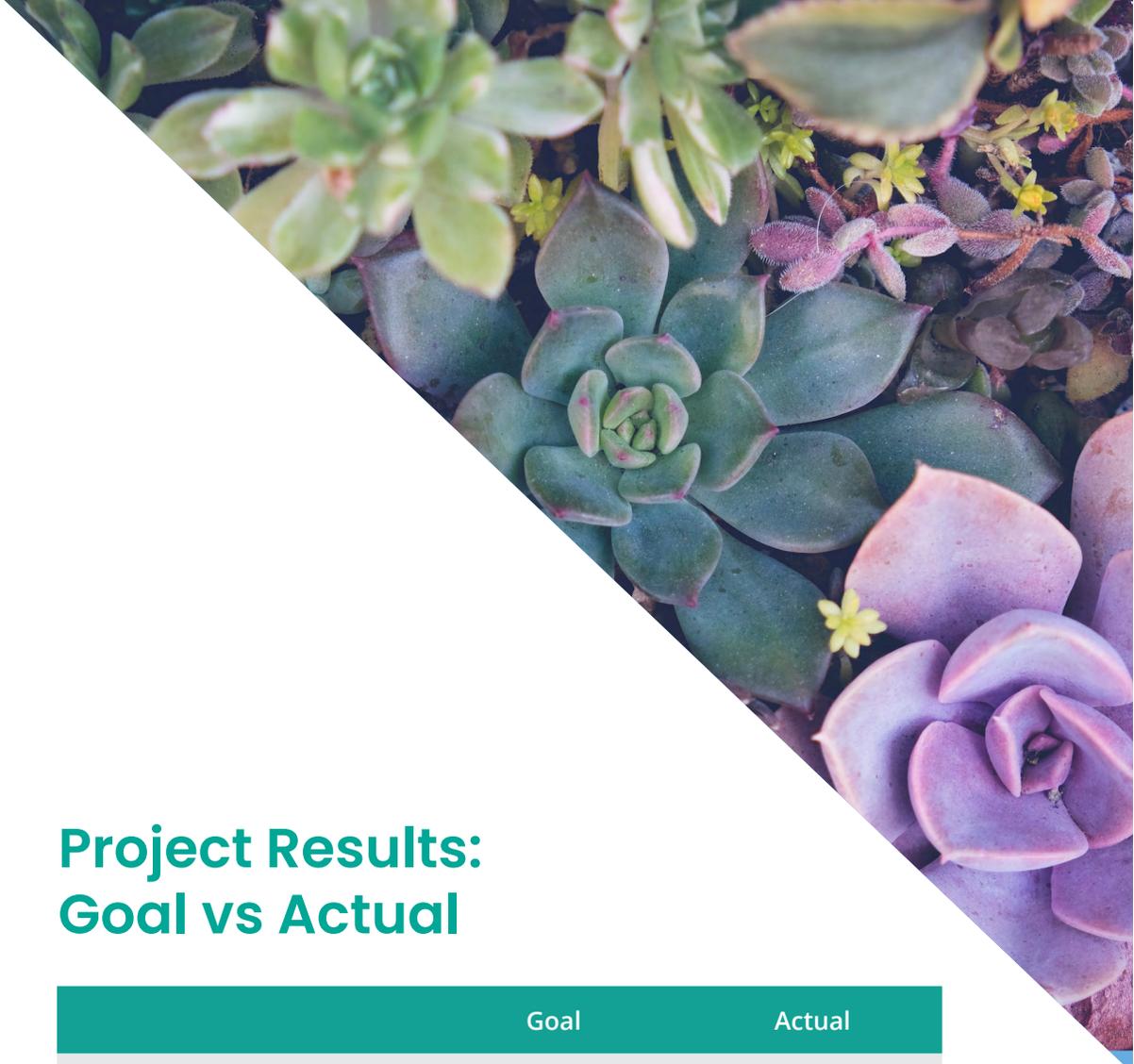
The primary objective of the Project was to reduce water use by 87.4 AF per year. The actual lifetime water savings is 96.62 AF per year, 111% of goal. The lifetime water savings was estimated at 1,174.5 AF. The actual lifetime water savings is 1,808.28 AF, 153% of goal.

Reduced demand for potable water also results in reduced energy used to convey and treat potable water supplies and thereby reduction of greenhouse gas (GHG) emissions. Thus, a secondary benefit was estimated annual energy savings of 287,737 kWh per year and GHG emission reductions of 79,889 kg CO₂e per year. The actual energy savings equates to 317,687 kWh per year and GHG emission reductions of 88,317 kg CO₂e per year.

At project completion, 75% of the water savings came from projects implemented in the City of Malibu, and the remaining 25% from the Topanga Canyon area. This is representative of the percentage of housing population per community.

Project Results: Goal vs Actual

	Goal	Actual
Annual Water Savings	87.40 AF	96.62
Lifetime Water Savings	1,174.50 AF	1,808.28 AF
Energy Savings	287,737 kWh	317,687 kWh
GHG Emission Reduction	79,889 kg CO ₂ e	88,317 kg CO ₂ e



WATER SAVINGS MEASURES

The water savings measures, offered to customers, changed over the course of the project as:

1. Project staff learned more about customers’ preferred measures,
2. The Woolsey Fire redefined customer priorities, and
3. The COVID pandemic curbed in-person customer contact.

The original measures and goals; modifications; and actual number of installations is shown in the chart on the right.

Water Saving Measure	Original Grant Proposal Quantity	Project Modification April 2018 Quantity	Actual Installed Quantity
ADDED MEASURES			
Smart Irrigation Controllers	NA	75	291
Flow Sensors with Master Valve	NA	75	3
Pressure Regulating Spray Heads	NA	27,000	389
High Efficiency Sprinkler Nozzles	NA	27,000	1,918
EXISTING MEASURES- KEPT SAME ACTIVITY LEVEL GOALS			
Graywater Reuse Retrofits	25	25	0
Smart Water Meters	400	400	2,446
Cisterns	25	25	3
EXISTING MEASURES- LOWERED ACTIVITY LEVEL GOALS			
Turf Replacement	200,000	100,000	65,739
High Efficiency Clothes Washers	100	50	77
High Efficiency Toilets	1,000	50	11
Rain Barrels	1,000	100	156
EXISTING MEASURES- MODIFIED INCENTIVE LEVEL			
Drip Irrigation	400 kits	30,000 SF	32,800 SF
ELIMINATED MEASURES FROM PROJECT			
Thermal Showerhead Shut-off Adapters	1,000	NA	NA
Hot Water Distribution Systems	100	NA	NA

As can be seen in the above chart, several measures did not actually meet the Project’s installation goals. On the other hand, smart water meters greatly exceeded the goal of 400, showing actual installation of 2,446 smart water meters.

WATER SAVINGS

Water Saving Measure	Quantity	Per Unit Savings	Annual Water Savings (GAL)	Annual Water Savings (AF)	Lifetime Water Savings (AF)
Smart Meters	2,446	6,843	16,737,978	51.37	1,284.17
High Efficiency Sprinkler Nozzles	1,963	2,263	4,442,269	13.63	68.16
Smart Irrigation Controllers (1> acre)	35	5,833	3,138,154	9.63	96.31
Smart Irrigation Controllers (< 1 acre)	231	13,490	3,116,190	9.56	95.63
Turf Replacement	65,739	34	2,235,126	6.86	205.78
High Efficiency Clothes Washers	77	10,688	822,976	2.53	35.36
Drip Irrigation	32,800	14	459,200	1.41	7.05
Pressure Regulating Spray Heads	389	835	324,815	1.00	9.97
Rain Barrels	156	621	96,876	0.30	1.49
Irrigation Flow Sensors	3	20,753	62,259	0.19	1.91
High Efficiency Toilets	11	3,421	37,631	0.12	2.31
Cisterns	3	3,019	9,057	0.03	0.14
Total			31,482,531	96.62	1,808.28

*Savings average of controllers >acre = 13,490 GPY and controller >acre = 5,833 GPY/station.

**Savings average of small cistern = 2,476 GPY, medium cistern = 3,063 GPY, and large cistern = 3,519 GY.

As shown in the chart to the left, the highest acre-feet (AF) per year savings rank as follows:

- The majority of annual water savings came from smart water meters, with 51.37 AFY; achieved through LA County Waterworks direct installation.
- The second highest annual water savings was achieved through installation of smart irrigation controllers, with 19.19 AFY; achieved through rebates and contractor direct installations.
- The third highest annual savings was through high efficiency sprinkler nozzles, at 13.63 AFY.

The highest lifetime AF savings are as follows:

- Smart water meters, with 1,284.17 lifetime AF savings.
- Turf replacement, with an expected life of 30 years has the second highest lifetime savings, at 205.78 lifetime AF.
- Smart irrigation controllers delivered the third highest lifetime savings, at 202.29 lifetime AF savings.

DESCRIPTIONS OF METHODS USED TO ESTIMATE PHYSICAL BENEFITS

Water Savings

The measurement of water savings has been projected using pre-determined or deemed unit savings estimates. Water savings for the majority of devices are based upon Metropolitan Water District’s (MWD) Water Savings assumptions. MWD’s savings methodologies are derived from numerous industry-accepted studies including studies done by MWD, its member agencies, national studies and standards, and energy utilities.

For smart water meters, savings from the United States Environmental Protection Agency’s Water Audits and Water Loss Control for Public Water Systems Report was utilized. It was estimated that a water agency can reduce water loss due to leaks by approximately 6.6%.

The table to the right includes each targeted measure, the per unit annual water savings, the life of savings, and associated savings sources.

Water Saving Measure	Unit of Measurement	Per Unit Water Savings (GPY)	Life of Savings (Years)	Savings Source
Smart Irrigation Controllers (> 1 Acre)	Station	5,833	10	MWD SoCal WaterSmart Savings Summary
Smart Irrigation Controllers (< 1 Acre)	Controller	13,490	10	MWD SoCal WaterSmart Savings Summary
Flow Sensors with Master Valves	Sensor	20,753	10	California Water Service Company Irrigation Rebate Analysis
Pressure Regulating Spray Heads	Spray Head	835	10	California Water Service Company Irrigation Rebate Analysis
High Efficiency Sprinkler Nozzles (Large Landscapes)	Nozzle	2,263	5	MWD High Efficiency Nozzle Evaluation, Measurement and Verification Report
Smart Water Meters	Meter	6,843	5	US Environmental Protection Agency Water Audit and Water Loss Control Pilot
Cisterns	Cistern	3,063	5	MWD SoCal WaterSmart Savings Summary
Turf Replacement	Square foot	34 per SF	30	MWD SoCal WaterSmart Savings Summary
High Efficiency Clothes Washers	Washer	10,688	14	MWD SoCal WaterSmart Savings Summary
High Efficiency Toilets	Toilet	3,421	20	MWD SoCal WaterSmart Savings Summary
Rain Barrels	Barrel	621	5	MWD SoCal WaterSmart Savings Summary
Drip Irrigation	Square Foot	14	5	Municipal Water District of Orange County Drip Irrigation Analysis



Energy and Greenhouse Gas Emission Reductions

Imported water for Los Angeles County Waterworks District 29 is a blend of 61% California State Water Project (SWP) and 39% Colorado River Aqueduct (CRA). According to the Department of Water Resources, approximately 4,126 kilowatt-hours per acre-foot (kWh/AF) is required for conveyance and pumping of SWP water to the Oso Pumping Plant (DWR Bulletin B-132-10, 2013), which is the nearest SWP pumping plant to the Greater Los Angeles County Region. Similarly, approximately 1,976 kWh/AF is required to convey CRA water to the Region (CPUC Study, page 64). Based on the ratio of these supplies, an estimated 3,288 kWh/AF of energy is used to provide imported supplies to Southern California agencies.

Additionally, the Project would avoid greenhouse gas emissions generated by the energy needed to import water. This value was calculated by applying the annual total-output statewide emission rate of 0.278 kg of CO₂e per kWh from the U.S. Environmental Protection Agency Emissions and Generation Resource Integrated Database for the CAMX sub-region.



MARKETING AND OUTREACH

The Project marketing materials focused on the value to a customer in creating a smart home and smart irrigation system. Depending on the Project phase, themes and messaging were modified to best resonate with the customer based upon the current circumstances.

Themes/Messaging over the course of the Project included:

- **Keep Your Green: Upgrade to Smart Irrigation**
- **How Smart is Your Home If It Isn't Water Smart?**
- **Turf Removal Rebate Increases: Act Now**
- **Help Your Community Save 28 Million Gallons of Water a Year**
- **Rebuild. Save water. Protect your home.**
- **Firescaping Your Yard Saves Water**
- **Start Saving Now – Limited Time Rebates Available**

Additionally, four case studies were created, showcasing customers' water-saving success stories, achieved by participating in the Malibu Smart Project.

Below are samples of the collateral used to market the Project.





INITIAL PROJECT FLYERS

The Project flyers, below, introduced the idea that customers could create water savings, without compromising their quality of life, by utilizing smart technologies and high efficiency products. The flyers listed the Project offerings, along with the incentives for each.

Flyers were distributed through community events, local restaurants and retail shops, as well as customer in-person meetings.



MALIBU SMART
Save water. Live well.



CUTTING-EDGE GREEN TECHNOLOGY
Seamlessly manage your landscape from anywhere. Get technology that monitors outdoor water use and alerts you to issues before they become costly problems.



SMART HOME - SMART YARD
You can now have landscape that is as smart as your home. A smart irrigation system can adjust your watering schedule based on local weather.



POSITIVE COMMUNITY IMPACT
You don't have to choose between maintaining a beautifully landscaped property and conserving water. We have solutions that will let you be a good neighbor, while saving water and money.

For rebates and water-saving tips, visit socialwatersmart.com

Keep Your Green: Upgrade to Smart Irrigation

You'll Be Surprised by How Smart Your Yard Can Be

SMART IRRIGATION PACKAGES REBATES
Combine some or all of these technologies to get the most water savings and a greater rebate.



 \$350 PER UNIT Master Valve + Flow Sensor Provides real-time water use monitoring that can identify and stop leaks in your system	 \$35 PER STATION Smart Cloud-based Irrigation Controller Tracks local weather to determine when and how much to water	 .25¢ PER FT. Drip Irrigation System Reduces overwatering by applying water near plant roots	 \$9 PER UNIT Pressure Regulating Spray Heads + Check Valves Prevents runoff and reduces water waste by regulating water pressure	 \$6 PER NOZZLE High-efficiency Sprinkler Nozzle Prevents water waste due to runoff by applying water where it is needed
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MAINTAIN YOUR LANDSCAPE. USE LESS WATER. SAVE MONEY.
You can have it all. Protect and enhance the landscaping investments you've made by upgrading to smart irrigation technologies, and enjoy the benefits of long-term water and cost savings - plus rebates.

Qualified homes in Malibu can get up to \$10,000 in rebates for installing a *Smart Irrigation Package*.



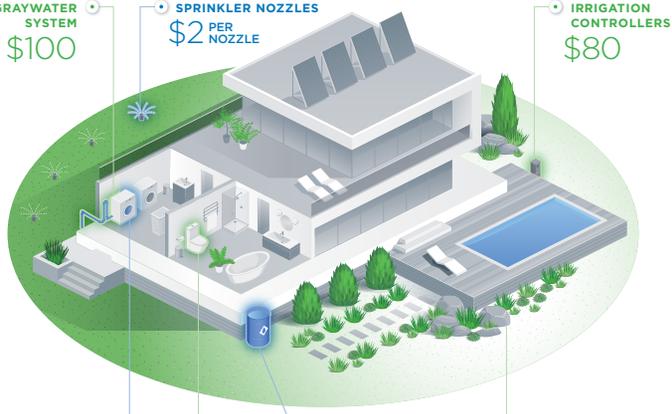
APPLY FOR REBATES TODAY! → Call 310-554-6210 or email water@malibusmart.org to get more information and schedule a consultation. Restrictions apply.



MALIBU SMART
Save water. Live well.

How smart is your home if it isn't water smart?

Water Smart Rebates for High Efficiency Products



 \$100 GRAYWATER SYSTEM	 \$2 PER NOZZLE SPRINKLER NOZZLES	 \$80 IRRIGATION CONTROLLERS
 \$85 CLOTHES WASHERS	 \$40 TOILETS	 \$35-350 RAIN BARRELS + CISTERNS
	 \$2 PER SQ FT LAWN REPLACEMENT	

For rebates and water-saving tips, visit socialwatersmart.com



APPLY FOR REBATES TODAY! → Go to socialwatersmart.com. Subject to available funds, and restrictions apply. For more info about the Graywater program, visit westbasin.org/greywater

INCREASED REBATE POSTCARD

The following postcard was used to inform customers about the increase in the rebate amount for turf replacement, in hopes of increasing response for this Project measure.



\$3
PER SQ FT

Turf Removal Rebate Increases

Malibu residents can now get **\$3 per square foot** when replacing their lawns with more sustainable landscaping.

In addition to the larger rebate, the maximum square footage has been increased to **5,000 square feet** for residential and **50,000 square feet** for commercial properties.

Restrictions apply. Synthetic turf is not eligible for the program. **Some limitations have been waived** for residents recovering from the recent fires.

More information can be found at bewaterwise.com.

Applications for the rebate will be available **beginning April 1**. Additional water-saving rebates for Malibu residents can also be found at malibusmart.org.



COMMUNITY WATER SAVING GOAL FLYERS

Understanding that customers in Malibu and Topanga possess a strong sense of community during times of need, the above flyers headlined the community goal to annually save 28 million gallons by taking action to implement incentivized water saving measures.



TOPANGA SMART
Save water. Live well.

Keep Your Green: Upgrade to Smart Irrigation

You'll Be Surprised by How Smart Your Yard Can Be

SMART IRRIGATION PACKAGES REBATES
Combine some or all of these technologies to get the most water savings and a greater rebate.



<p>\$350 PER UNIT Master Valve + Flow Sensor Provides real-time water use monitoring that can identify and stop leaks in your system</p>	<p>\$35 PER STATION Smart Cloud-based Irrigation Controller Tracks local weather to determine when and how much to water</p>	<p>.25¢ PER FT. Drip Irrigation System Reduces overwatering by applying water near plant roots</p>	<p>\$9 PER UNIT Pressure Regulating Spray Heads + Check Valves Prevents runoff and reduces water waste by regulating water pressure</p>	<p>\$6 PER NOZZLE High-efficiency Sprinkler Nozzle Prevents water waste due to runoff by applying water where it is needed</p>
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MAINTAIN YOUR LANDSCAPE. USE LESS WATER. SAVE MONEY.
You can have it all. Protect and enhance the landscaping investments you've made by upgrading to smart irrigation technologies, and enjoy the benefits of long-term water and cost savings - plus rebates.

Qualified homes in Topanga can get up to \$10,000 in rebates for installing a *Smart Irrigation Package*.



APPLY FOR REBATES TODAY! → Call 310-554-6210 or email water@topangasmart.org to get more information and schedule a consultation. Restrictions apply.

CUTTING-EDGE GREEN TECHNOLOGY
Seamlessly manage your landscape from anywhere. Get technology that monitors outdoor water use and alerts you to issues before they become costly problems.

SMART HOME - SMART YARD
You can now have landscape that is as smart as your home. A smart irrigation system can adjust your watering schedule based on local weather.

POSITIVE COMMUNITY IMPACT
You don't have to choose between maintaining a beautifully landscaped property and conserving water. We have solutions that will let you be a good neighbor, while saving water and money.

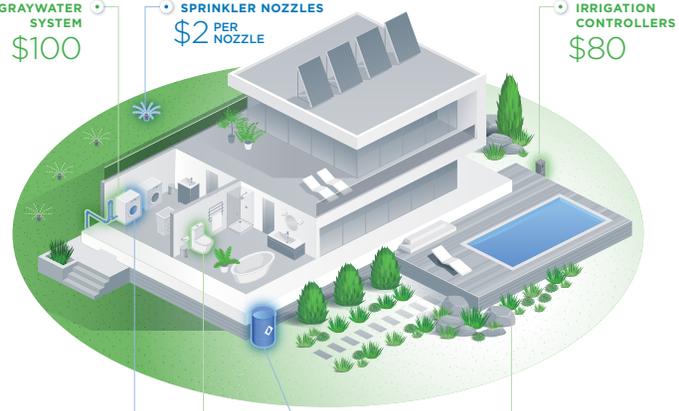
For rebates and water-saving tips, visit socialwatersmart.com



TOPANGA SMART
Save water. Live well.

How smart is your home if it isn't water smart?

Water Smart Rebates for High Efficiency Products



<p>GRAYWATER SYSTEM \$100</p>	<p>SPRINKLER NOZZLES \$2 PER NOZZLE</p>	<p>IRRIGATION CONTROLLERS \$80</p>
<p>CLOTHES WASHERS \$85</p>	<p>TOILETS \$40</p>	<p>RAIN BARRELS + CISTERNS \$35-350</p>
<p>LAWN REPLACEMENT \$2 PER SQ FT</p>		

For rebates and water-saving tips, visit socialwatersmart.com



APPLY FOR REBATES TODAY! → Go to socialwatersmart.com. Subject to available funds, and restrictions apply. For more info about the Graywater program, visit westbasin.org/greywater

AFTER THE WOOSLEY FIRE

With occurrence of the Woosley Fire, customers were highly cognizant of the need to firescape their property's while using water as efficiently as possible. The following flyers illustrated the means to accomplish this by taking advantage of the Project's smart irrigation rebates.







Turf Removal Rebate Increases

Malibu residents can now get **\$3 per square foot** when replacing their lawns with more sustainable landscaping.

In addition to the larger rebate, the maximum square footage has been increased to **5,000 square feet** for residential and **50,000 square feet** for commercial properties.

Restrictions apply. Synthetic turf is not eligible for the program. **Some limitations have been waived for residents recovering from the recent fires.**

More information can be found at bewaterwise.com.

Applications for the turf removal rebate will be available **beginning April 1**.

\$100 GRAYWATER SYSTEM	\$85 CLOTHES WASHERS	\$40 TOILETS	\$35-350 RAIN BARRELS & CISTERNS	\$80 IRRIGATION CONTROLLERS	\$2 Per Nozzle SPRINKLER NOZZLES
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Start saving now! Apply for rebates at socialwatersmart.com.

Subject to available funds, and restrictions apply. Some restrictions lifted for those impacted by the Woolsey fire. Learn more about **firescaping** resources and either the Malibu Smart program at malibusmart.org or Topanga Smart program at topangasmart.org.










Making Every Drop Count



No-Cost Water Assessments + Audits

Customers can get a review of indoor and outdoor water systems **FREE** of charge through the following programs.



Landscape Irrigation Assessment

The Landscape Irrigation Efficiency Program (L.I.E.P.) offers the opportunity to find water savings with a **FREE** irrigation assessment by a certified landscape professional, and receive high efficiency sprinkler nozzles installed for **FREE**.*

To schedule a FREE landscape assessment contact WaterWise Consulting at 888-987-9473 or email info@waterwise-consulting.com.

*Not all customers may qualify for free sprinkler nozzles. Quantities are limited and are ordered on a first-come, first-served basis until funds are exhausted.



Indoor & Outdoor Water Audits

Receive a comprehensive indoor and outdoor water review and leak check. The **FREE** inspection includes toilets, sinks, showers, dish and clothes washer, sprinklers, valves and plants.

When the survey is complete, customers will receive a detailed report with suggestions and recommendations to reduce overall water use. Surveys typically take about 1-2 hours to complete. The customer makes the decision to fix leaks and implement recommendations.

We encourage customers to participate in the assessment.

To request this FREE indoor and outdoor water audit, submit a request to wateraudit@dpw.lacounty.gov.



FIRESCAPING WORKSHOPS AND WEBINARS

Firescaping Workshops and Webinars were offered to customers as shown in the following marketing pieces:

FIND OUT WHICH LANDSCAPES HAVE A HIGH FIRE RISK AND WHY

FREE

Firescaping Workshop

Firescaping uses smart landscaping techniques and native plants to **protect your home from wildfires**. These practices combined with smart irrigation systems can help you safeguard your investment, use less water and **save money on your water bill**.

SAVE THE DATE

FIND OUT WHICH LANDSCAPES HAVE A HIGH FIRE RISK AND WHY

FREE

Firescaping Workshop

Firescaping uses smart landscaping techniques and native plants to **protect your home from wildfires**. These practices combined with smart irrigation systems can help you safeguard your investment, use less water and **save money on your water bill**.

Please join us at one of two **FREE** workshops to:

- ▶ Identify high-risk landscapes
- ▶ Get tips for reducing your fire risk
- ▶ Learn which plants and building materials help minimize damage
- ▶ Make your home more firefighter-accessible

9.10.19 or **11.5.19** **5:30-7:30 PM @ MALIBU CITY HALL**
23825 Stuart Ranch Road in the Multi-Purpose Room

Rebuild. Save Water. Protect Your Home.

There are discounts for water-saving products and services available through 2019, for all residents, including landscaping that was damaged or destroyed by the fire. Firescaping and water-saving resources available at malibusmart.org.

Increased rebate effective JULY 1
\$5 PER SQ FT
LAWN REPLACEMENT

QUALIFIED CONTRACTORS are ready and able to help. For a list, go to malibusmart.org.

POSTCARDS AND DIRECT MAIL

Postcards and direct mail were added later in the Project to inform customers that Project measures were available only for a limited time:

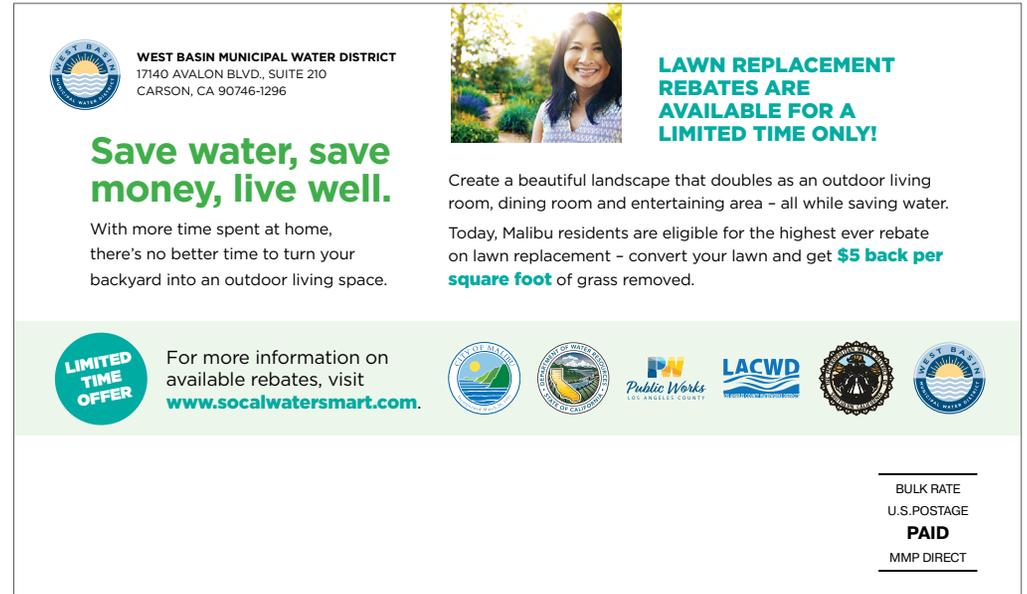


MALIBU SMART

Save Water & Money

LIVE WELL

For A Limited Time - Receive \$5 Per Square Foot



WEST BASIN MUNICIPAL WATER DISTRICT
17140 AVALON BLVD., SUITE 210
CARSON, CA 90746-1296

LAWN REPLACEMENT REBATES ARE AVAILABLE FOR A LIMITED TIME ONLY!

Save water, save money, live well.

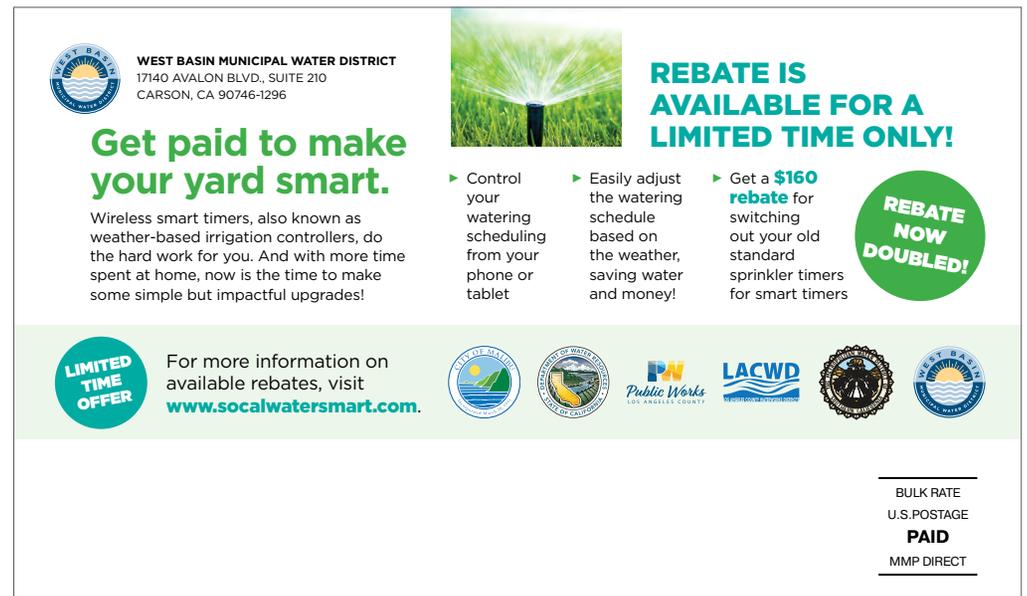
With more time spent at home, there's no better time to turn your backyard into an outdoor living space.

Create a beautiful landscape that doubles as an outdoor living room, dining room and entertaining area – all while saving water.

Today, Malibu residents are eligible for the highest ever rebate on lawn replacement – convert your lawn and get **\$5 back per square foot** of grass removed.

LIMITED TIME OFFER For more information on available rebates, visit www.socalwatersmart.com.

**BULK RATE
U.S. POSTAGE
PAID
MMP DIRECT**



WEST BASIN MUNICIPAL WATER DISTRICT
17140 AVALON BLVD., SUITE 210
CARSON, CA 90746-1296

REBATE IS AVAILABLE FOR A LIMITED TIME ONLY!

Get paid to make your yard smart.

Wireless smart timers, also known as weather-based irrigation controllers, do the hard work for you. And with more time spent at home, now is the time to make some simple but impactful upgrades!

- ▶ Control your watering scheduling from your phone or tablet
- ▶ Easily adjust the watering schedule based on the weather, saving water and money!
- ▶ Get a **\$160 rebate** for switching out your old standard sprinkler timers for smart timers

LIMITED TIME OFFER For more information on available rebates, visit www.socalwatersmart.com.

REBATE NOW DOUBLED!

**BULK RATE
U.S. POSTAGE
PAID
MMP DIRECT**

PROJECT CASE STUDIES

Project Case Studies are a powerful and credible means to showcase success stories and motivate other customers to take action. Below are the four case studies used to demonstrate the significant water savings achieved by actual Project participants.



MALIBU SMART
Save water. Live well.

The Clarfields Saved a Whopping 385,000 Gallons of Water a Year

Simple Fixes Resulted in 38% Off the Clarfield's Water Bill

"The assessment Malibu Smart provided was super helpful. Recommendations were simple and straightforward. Landscape is doing great and our trees are all doing well. Everything is thriving, even with no rain. The only thing we would do different is do it sooner." — The Clarfields

When Mitch and Chris Clarfield got a call from **MALIBU SMART** about reducing water use at their property, they said "Yes, help us." So, we did.

One of our **MALIBU SMART** certified consultants went out to the Clarfield property - a challenging site to water due to significant slopes, multiple levels, a great variety of trees and plants, and various types of irrigation equipment. The consultant provided the Clarfields with easy-to-implement recommendations. Shortly thereafter, the **MALIBU SMART** team worked directly with Mitch and his gardener to put the plan into action including:

- Fixing numerous broken sprinkler heads
- Installing high efficiency sprinkler nozzles
- Installing smart irrigation timers



MALIBU SMART offers extensive rebates to customers who install high efficiency sprinklers or replace their lawns.

For more information and to schedule an assessment, please call 310-554-6210 or visit www.malibusmart.org.

Customer Options

OPTION 1

Take advantage of **FREE** high efficiency sprinkler nozzles with **FREE** installation. It's quick, easy, and—as we said—**FREE!**

OPTION 2

For larger properties, take advantage of **generous incentives** for comprehensive sprinkler system upgrades. Get the newest technology and **see significant savings** all with a quick payback.

OPTION 3

Replace your lawn with climate appropriate plants and efficient irrigation. Get **\$5 per square foot back** while your landscape becomes drought and fire resilient.










MALIBU SMART
Save water. Live well.

The O'Bryans Installed a New High Efficiency Sprinkler System and Reduced Their Water Bill by 25%!

Even better, the investment had a payback of less than one month.

"Participation was seamless. MALIBU SMART was timely and professional. Now the system automatically adjusts the watering based on local weather, including wind or rain events. — the new technology is working great. We've been able to keep our lawn and it looks better than ever." — The O'Bryans

Conserving water is important to Duros and Cyndi O'Bryan, but they didn't know how to go about it. What's more, they entertain outdoors regularly, so they wanted to keep their grass intact. Not to worry. By installing a new high efficiency irrigation system and smart timers, the O'Bryans have cut their water usage by 50% and they still have their full lawn.

The O'Bryans invited the **MALIBU SMART** team out to their home to assess the property and make recommendations for conserving water. It was an easy decision to move forward. The payback was attractive and the process was straightforward. They scheduled program contractor Valley Soil to come to their property and install:

- New pressure regulating sprinkler heads
- New high efficiency sprinkler nozzles
- New smart irrigation timers



MALIBU SMART offers extensive rebates to customers who install high efficiency sprinklers or replace their lawns.

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MALIBU SMART
Save water. Live well.

With Generous Rebates, The Sarmientos Completely Transformed Their Landscape

"The MALIBU SMART Folks Did the Assessment, Installed the New Sprinkler Nozzles, Coordinated the Landscape Contractor and Did All the Paperwork. The Program is So Easy."

"By making the recommended changes, we were able to transform our damaged landscape and make our whole property more inviting to family and friends." — The Sarmientos

Ellen and Cesar Sarmiento didn't hold back when they heard about the **MALIBU SMART** program. From high efficiency sprinklers to lawn replacement, they said yes to it all. And, after their landscape had burned in the Woosley Fire, the program helped them create a more inviting landscape that will help protect their property from fire damage in the future.



- Removed 6,400+ square feet of grass and replaced with native landscaping and fruit trees
- Installed new sprinkler heads, nozzles & drip irrigation
- Installed new smart irrigation timer
- Installed 100 gallon rain barrel

MALIBU SMART offers extensive rebates to customers who install high efficiency sprinklers or replace their lawns.

For more information and to schedule an assessment, please call 310-554-6210 or visit www.malibusmart.org.

Customer Options

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OPTION 2

For larger properties, take advantage of **generous incentives** for comprehensive sprinkler system upgrades. Get the newest technology and **see significant savings** all with a quick payback.

OPTION 3

Replace your lawn with climate appropriate plants and efficient irrigation. Get **\$5 per square foot back** while your landscape becomes drought and fire resilient.



MALIBU SMART
Save water. Live well.

Steven Sindell Installed a New High Efficiency Sprinkler System and Reduced His Water Bill by 65%!

Steven Sindell knew he was using too much water, but he didn't know how much or what to do about it. Before, his lawn was either over or under watered – today the property looks great.

"I'm so glad I did it. It was worth the small investment, and now I can better manage my water use. I don't have one complaint - it was easy." — Steven Sindell

Steven Sindell was happy when **MALIBU SMART** came out to his home, did a free assessment, and helped him put a plan into action that would conserve water, while improving the look of his property and saving money each month.

Steven says all he had to do was coordinate appointment times and now, his lawn has never looked better. Program Contractor, Valley Soil, installed:

- New pressure regulating sprinkler heads
- New high efficiency sprinkler nozzles
- New smart irrigation timers



MALIBU SMART offers extensive rebates to customers who install high efficiency sprinklers or replace their lawns.

For more information and to schedule an assessment, please call 310-554-6210 or visit www.malibusmart.org.

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OPTION 3

Replace your lawn with climate appropriate plants and efficient irrigation. Get **\$5 per square foot back** while your landscape becomes drought and fire resilient.



SOCIAL MEDIA

Social media was utilized as an additional means to reach customers. Posts on FaceBook, Instagram, and Nextdoor included water facts, technology overviews, Project rebates, and more.



Water Smart
date



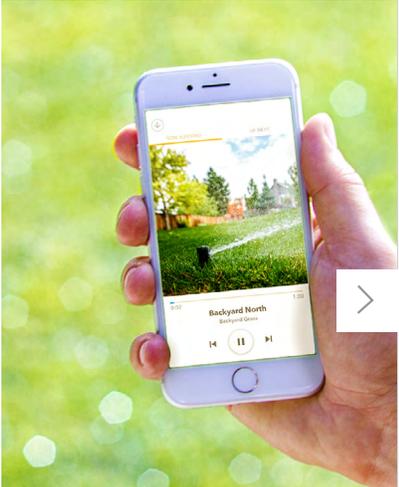
Millions of gallons of water are wasted in your community each year due to over-watering, now your landscape can be as smart as your home. Installing a smart sprinkler timer



Cutting-edge green technology

Limited time offer

[Learn More](#)



Provides real time data + tracks local w

Limited time offer

[Learn](#)

👍 11
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➔ Share

For a limited time – several valuable rebates are still available by visiting <https://SoCalWaterSmart.com> today:

- ✓ Turf Removal = \$5 per square foot
- ✓ Smart Sprinkler Timers = \$160 ea (double the original rebate!)
- ✓ High-Efficiency Clothes Washer = \$85
- ✓ Rain Barrels and Cisterns = \$30 - \$350
- ✓ Premium High Efficiency Toilets = \$40
- ✓ High-Efficiency Sprinkler Nozzles = \$2 per nozzle

For questions about the rebates listed above – or programs to create beautiful native landscaping – please contact us at 310-554-6210 or water@topangasmart.org
[bit.ly/3n9kNS6-savewater](https://bit.ly/3n9kNS6)



LATIMES.COM
Want to save energy and fight climate change? Try using less water
Nearly one-fifth of all electricity use in California goes to moving and treating water.



During the Project ads were designed to be more visual.

 **Water Smart**
date 

With more time spent at home, there's no better time to turn your backyard into an outdoor living space.




**Save water,
save money,
live well.**

Start saving now!
Rebates are available for a limited time. For more information on rebates available,
WWW.SOCALWATERSMART.COM [Learn More](#)




**Make your
home + yard
smart.**

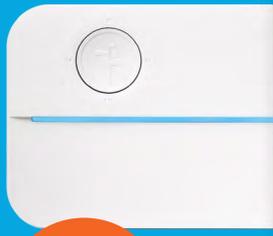



**Get paid
to make your
yard smart.**

DIRECT INSTALLATION OF SMART CONTROLLERS

Messaging was created to promote the free direct installation of smart controllers. This advertising was used in direct mail postcards and social media.

MALIBU SMART 
TOPANGA SMART




FREE
SMART
Sprinkler
Timer +
Installation

ONLY
250
LEFT

GET YOURS NOW

\$500+ VALUE

The City of Malibu, West Basin Municipal Water District and the County of Los Angeles Public Works have teamed up to help Malibu and Topanga residents save water and money by providing **FREE SMART sprinkler timers**.

Get a **FREE** Smart Sprinkler Timer!




California Experiencing **Record Drought**

Help Your Community **Save Water**

GET YOURS NOW

\$500+ VALUE

ONLY 150 LEFT



The City of Malibu, West Basin Municipal Water District and the County of Los Angeles Public Works have teamed up to help Malibu and Topanga residents save water and money by providing **FREE SMART** sprinkler timers.

The Rachio timer will automatically customize a watering schedule for your yard, while enabling you to control your watering from your phone.



Save up to 50% on outdoor water use



Control or share control with mobile app



Sends high flow leak alerts

Get started today! Scan the QR code or visit:
<https://bit.ly/3rV50tY>

MALIBU SMART

TOPANGA SMART










WEST BASIN MUNICIPAL WATER DISTRICT
17140 AVALON BLVD., SUITE 210
CARSON, CA 90746-1296

FREE SMART Sprinkler Timer + Installation

The Rachio timer will automatically customize a watering schedule for your yard, while enabling you to control your watering from your phone.

Start saving water today!



Save up to 50% on outdoor water use



Control or share control with mobile app



Sends high flow leak alerts



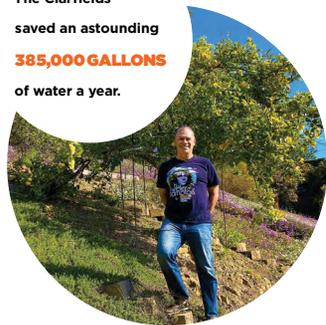
Get started today!
Scan the QR code or visit:
<https://bit.ly/3rV50tY>








The Clarfields saved an astounding **385,000 GALLONS** of water a year.



PROJECT SCHEDULE

The grant for the Project was awarded in 2015 with a fully executed agreement in place by December of 2016. From early 2017 through April 2017, the Project partners worked to secure a consulting firm to administer the program, conduct marketing and outreach, and provide customer support services. RW Jones was the selected firm. RW Jones spent a year conducting an in-depth market analysis and program design culminating in the project launch in July of 2018.

Over the next two years, the project faced two crises that impacted the schedule: the Woolsey Fire and the Covid Pandemic. DWR granted a project extension through 2024.

The overall Project goals were achieved in spite of the schedule set back.

Comprehensive Water Conservation Project	Start Date	Initial End Date	Actual End Date
Task 1: Project Management	Nov-15	Sep-19	Dec-22
Task 2: Labor Compliance Project			
Task 3: Reporting	Sep-16	Sep-19	Dec-22
Task 4: Land Purchase/Easement – Not applicable			
Task 5: Feasibility Studies – Not applicable			
Task 6: CEQA Documentation – Not applicable			
Task 7: Permitting – Not applicable			
Task 8: Design – Not applicable			
Task 9: Project Monitoring Plan	Nov-16	Dec-16	Dec-21
Task 10: Construction Contracting – Not applicable			
Task 11: Construction Administration	Nov-17	Nov-19	Aug-22
Task 12: Construction/Implementation Activities	Nov-17	Aug-19	Aug-22
Subtask 12.1: Customer Targeting and Project Marketing	Nov-17	Jul-19	Aug-22
Subtask 12.2: Rebate Implementation and Incentives	Jan-17	Aug-19	Aug-22
Subtask 12.3: Equipment Procurement	Aug-16	Jul-19	Aug-22
Subtask 12.4: Installations	Sep-16	Aug-19	Aug-22



PROJECT OBSERVATIONS

As with all first-of-a-kind Projects, at project completion there are take-aways and lessons learned. For the Malibu and Topanga Smart Project, the following observations were noted:

-  The Project's prime water savings opportunities came from targeting the highest and most inefficient users of water. The Project successfully marketed to the Top Highest Water Consumers and exceeded the water savings goal. Utilization of this targeting strategy also aligns with the approach required in the State's Framework Legislation: SB606 and AB1668.
-  To attract participation, it is necessary to offer measures that customers value. With high end properties, customers were not interested in replacing their designer showerheads and toilets. Generally speaking, they preferred retrofits that did not alter the look of their properties such as smart meters and high efficiency nozzles.
-  Landscape and irrigation retrofit projects can be lengthy and complicated. As such, customers require handholding and support services throughout in order to complete the process. Without strong customer support, there is a high customer abandonment level.
-  Paying contractors directly can eliminate many barriers and engage the landscape industry to act as a Project partner in promoting the Project. Through direct contractor payment, cash flows increase, and customers do not need to act as intermediaries between Project administration and contractors.
-  Many customers utilize contractors or onsite staff that are not licensed. Because of this, incentives could not be paid directly to these individuals or companies.
-  Working with a trusted community member (in this case former Malibu Mayor, Laura Rosenthal) greatly boosted Project credibility with numerous homeowners, most likely increasing customer response.
-  The direct installation Project design is well received by customers and overcomes many barriers when compared with the cumbersome standard rebate format.



COST AND DISPOSITION OF FUNDS

BUDGET: PROJECTIONS VS ACTUAL

The original Project budget for the Malibu and Topanga Smart Project was \$1,539,260 for all funding partners. \$1,059,260 from the grant and \$480,000 as a funding match from the Project partners: West Basin MWD, LA County Waterworks, and the City of Malibu.

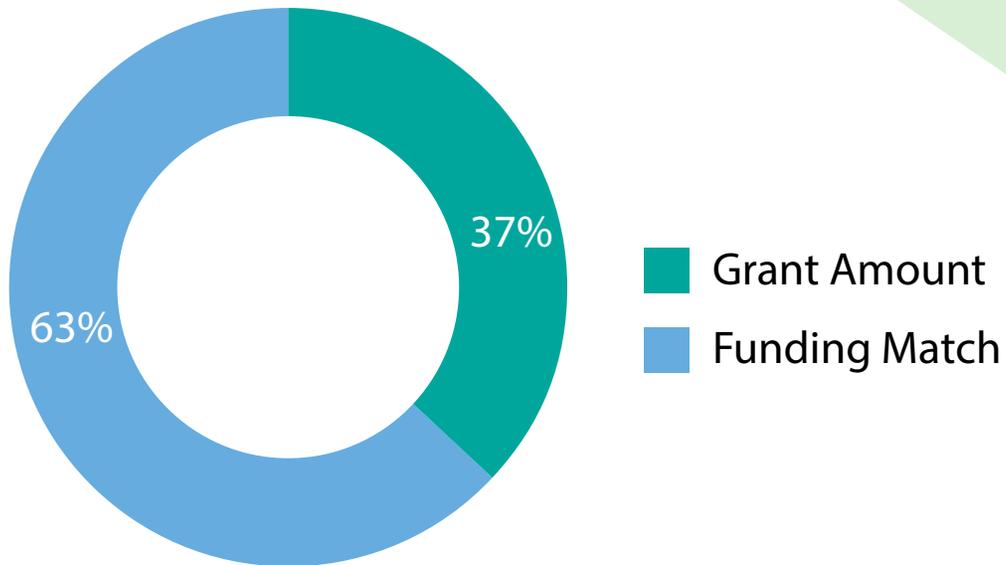
The entire budget was expended. The grant funds remained as projected. The actual customer response resulted in the addition of **\$1,476,203** for Smart Meter installations from LA County Waterworks. The total funds expended for the project was **\$2,829,103**.

Table below, displays the **final expenditures, broken down by the main grant funding categories**, including administration, planning, monitoring, and construction. The chart shows the grant amount and funding match, as compared with the amounts expended.

Category	Grant Amount	Funding Match	Total Budget	Grant Amount Expended	Funding Match Expended	Total Amount Expended
Direct Project Administration						
Project Management and Reporting	\$62,076	\$ 0	\$62,076	\$62,076	\$ 0	\$62,076
Land Purchase/Easement						
Land Purchase/Easement	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Planning/Design/Engineering/Environmental Documentation						
Performance Monitoring Plan	\$24,900	\$ 0	\$24,900	\$24,900	\$ 0	\$24,900
Construction/Implementation						
Construction Administration	\$547,100	\$ 0	\$547,100	\$547,100	\$ 0	\$547,100
Construction Implementation Activities	\$425,184	\$480,000	\$905,184	\$425,184	\$1,769,843	\$2,195,027
Grand Total	\$1,059,260	\$480,000	\$1,539,260	\$1,059,260	\$1,769,843	\$2,829,103

The funding match changed from 31% or \$480,000 to 63% or \$1,769,843.

Annual Expenditures



ORIGINAL MEASURE BUDGET

The following table lists the originally proposed measure quantities and budget line items by Project partner, showing an overall cost of \$802,834.

Components	# of Hrs./ Units	Malibu Cost Share	MWD/West Basin Share	LACWW Cost Share	Total Cost Share	DWR Grant Cost	Total Cost
High Efficiency Clothes Water Rebates	100	\$0	\$8,500	\$0	\$8,500	\$0	\$8,500
High Efficiency Toilet Rebates	1,000	\$0	\$40,000	\$0	\$40,000	\$0	\$40,000
Rain Barrel Rebates	1,000	\$0	\$35,000	\$0	\$35,000	\$0	\$35,000
Cistern Rebates	25	\$0	\$12,500	\$0	\$12,500	\$12,500	\$25,000
Graywater Rebates and Permits	25	\$2,000	\$0	\$0	\$0	\$12,500	\$12,500
Turf Replacement Rebates	200,000	\$0	\$0	\$200,000	\$200,000	\$125,000	\$325,000
Hot Water on Demand Systems	100	\$0	\$0	\$0	\$0	\$20,000	\$20,000
Drip Irrigation Kits	400	\$0	\$0	\$0	\$0	\$70,000	\$70,000
Showerhead Temperature Sensor Adaptors	1,000	\$0	\$0	\$0	\$0	\$20,000	\$20,000
Smart Water Meter Installations	400	\$0	\$0	\$0	\$0	\$120,000	\$120,000
CA Friendly Landscape Classes	0	\$0	\$16,000	\$0	\$0	\$0	\$16,000
Graywater Classes	0	\$0	\$0	\$0	\$0	\$45,184	\$45,184
Indoor/Outdoor Surveys	250	\$0	\$6,250	\$0	\$0	\$0	\$6,500
Outdoor Surveys	250	\$0	\$0	\$50,000	\$0	\$0	\$50,250
Installation of Smart Meters	400	\$0	\$0	\$8,500	\$0	\$0	\$8,900
		\$2,000	\$118,250	\$258,500	\$296,000	\$425,184	\$802,834

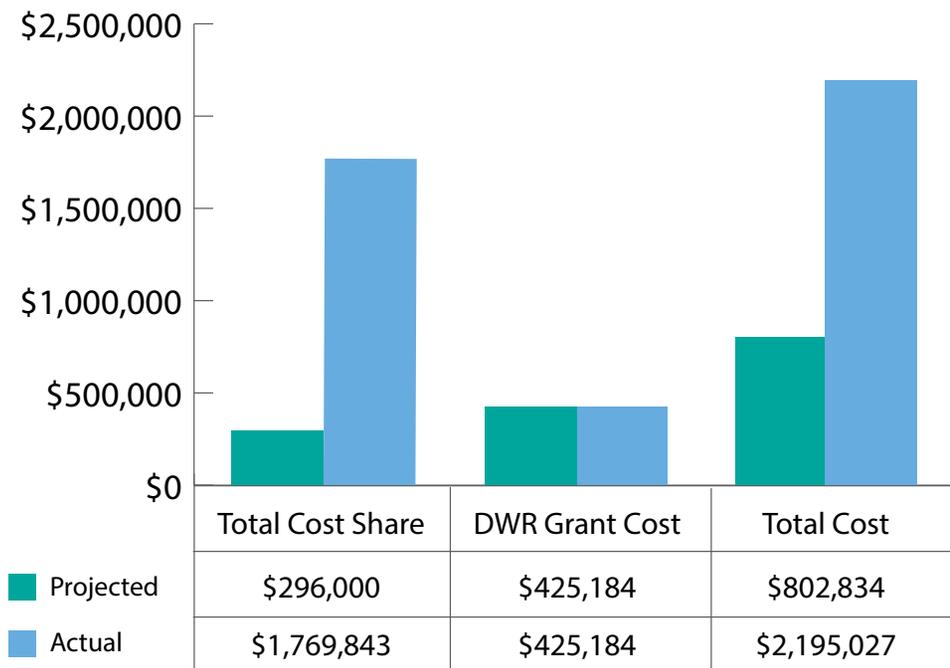
UPDATED MEASURE BUDGET FOR REDESIGNED PROJECT

As stated earlier, as the Project was redesigned to more effectively target the highest water use and better align with the community. The following table lists the updated budget showing measure quantities, partner shares, and line-item budgets. The partners provided more funding match than originally proposed due to additional smart water meter installations..

Components	Units	Malibu Cost Share	MWD/West Basin Share	LACWW Cost Share	Total Cost Share	DWR Grant Cost	Total Cost
High Efficiency Clothes Water Rebates	50	\$0	\$4,250	\$0	\$4,250	\$0	\$4,250
High Efficiency Toilet Rebates	50	\$0	\$2,000	\$0	\$2,000	\$0	\$2,000
Rain Barrel Rebates	100	\$0	\$3,500	\$0	\$3,500	\$0	\$3,500
Cistern Rebates	25	\$0	\$6,250	\$0	\$6,250	\$0	\$6,250
Graywater Rebates and Permits	25	\$2,000.00	\$0	\$0	\$0	\$12,500	\$12,500
Turf Replacement Rebates	200,000	\$0	\$0	\$200,000	\$200,000	\$0	\$200,000
Drip Irrigation System Rebates	30,000	\$0	\$0	\$0	\$0	\$7,500	\$7,500
Smart Water Meter Installations	400	\$0	\$0	\$0	\$0	\$120,000	\$120,000
Smart Irrigation Controller Rebates	2,808	\$0	\$98,280	\$0	\$98,280	\$0	\$98,280
High Efficiency Sprinkler Nozzles	28,080	\$0	\$168,480	\$0	\$168,480	\$0	\$168,480
Pressure Regulating Spray Heads	28,080	\$0	\$0	\$0	\$0	\$252,720	\$252,720
Flow Sensors with Master Valves	78	\$0	\$0	\$0	\$0	\$27,300	\$27,300
Indoor/Outdoor Surveys	250	\$0	\$6,250	\$0	\$0	\$0	\$0
Outdoor Surveys	250	\$0	\$0	\$50,000	\$0	\$0	\$0
Installation of Smart Meters	400	\$0	\$0	\$8,500	\$0	\$0	\$0
		\$2,000	\$289,010	\$258,500	\$482,760	\$420,020	\$902,780

ACTUAL MEASURE EXPENDITURES

As stated earlier, the actual customer response resulted in the addition of **\$1,476,203** for smart meter installations from LA County Waterworks. The grant funding for measures remained as projected.

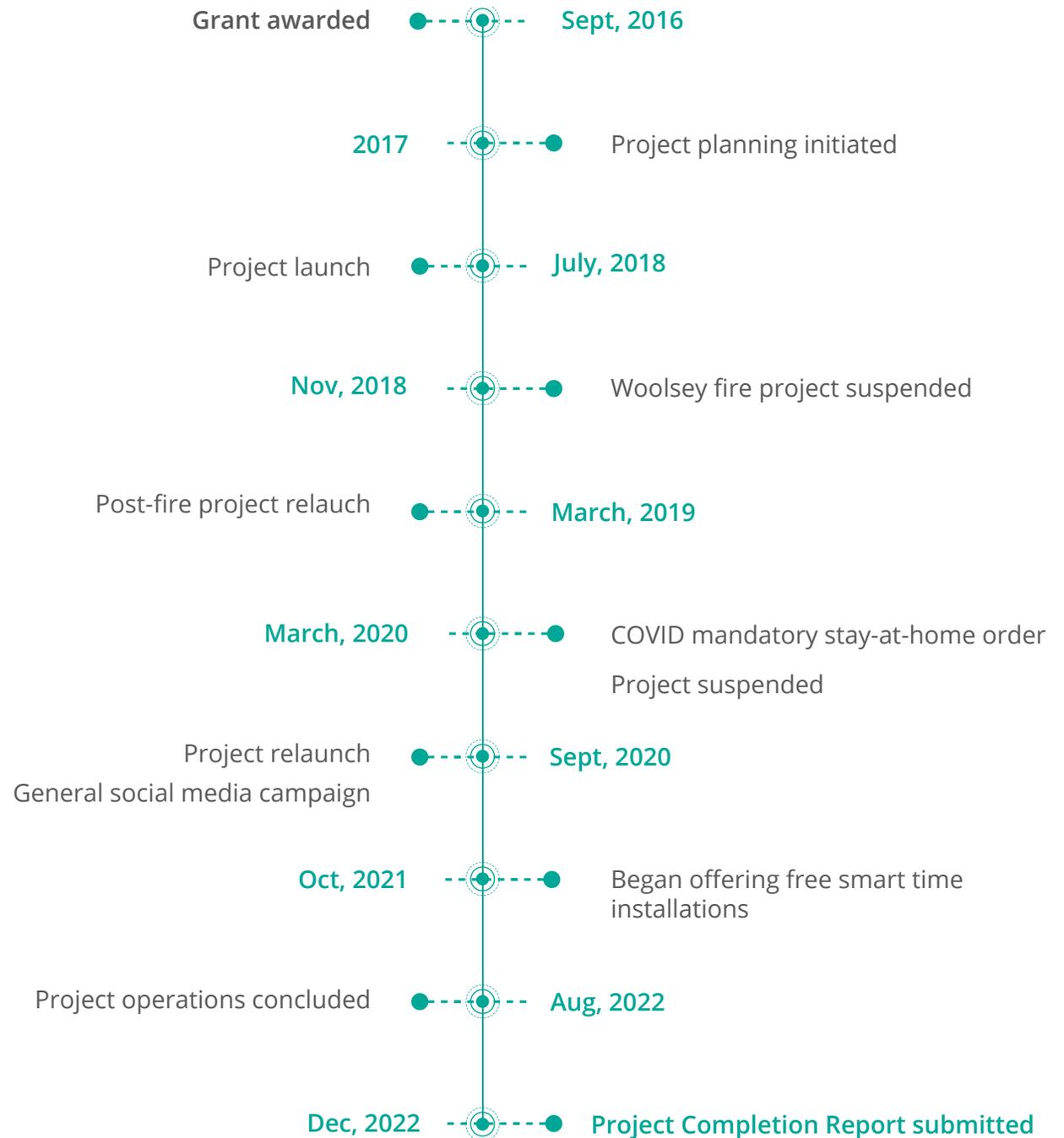


The following table lists the final measure quantities and expenditures based upon actual customer response:

Components	Units	Malibu Cost Share	MWD/West Basin Share	LACWW Cost Share	Total Cost Share	DWR Grant Cost	Total Cost
High Efficiency Clothes Water Rebates	77	\$0	\$6,545	\$0	\$6,545	\$0	\$6,545
High Efficiency Toilet Rebates	11	\$0	\$440	\$0	\$440	\$0	\$440
Rain Barrel Rebates	156	\$0	\$6,240	\$0	\$6,240	\$0	\$6,240
Cistern Rebates	3	\$0	\$900	\$0	\$900	\$0	\$900
Graywater Rebates	0	\$0	\$0	\$0	\$0	\$0	\$0
Turf Replacement Rebates	65,739	\$0	\$187,692	\$62,421	\$250,113	\$60,000	\$310,113
Drip Irrigation System Rebates	32,800	\$0	\$0	\$0	\$0	\$24,851	\$24,851
Smart Water Meter Installations	2,446	\$0	\$0	\$1,476,203	\$1,476,203	\$245,501	\$1,721,704
Smart Irrigation Controller Rebates	291	\$0	\$19,098	\$0	\$19,098	\$87,087	\$106,185
High Efficiency Sprinkler Nozzles	1,918	\$0	\$799	\$0	\$799	\$4,560	\$5,359
Pressure Regulating Spray Heads	389	\$0	\$0	\$0	\$0	\$2,655	\$2,655
Flow Sensors with Master Valves	3	\$0	\$0	\$0	\$0	\$530	\$530
Indoor/Outdoor Surveys	13	\$0	\$0	\$2,730	\$2,730	\$0	\$2,730
Outdoor Surveys	43	\$0	\$6,775	\$0	\$6,775	\$0	\$6,775
Installation of Smart Meters	NA	\$0	\$0	\$0	\$0	\$0	\$0
		\$0	\$228,489	\$1,541,354	\$1,769,843	\$425,184	\$2,195,027



PROJECT SCHEDULE





Conclusion

The State is in the process of implementing the most stringent water efficiency objectives ever seen in California—stemming from California’s State Framework Legislation passed in 2018.

With the challenges of the State Framework and the expectation of future drought cycles, agencies must look to new and innovative approaches to achieve heightened levels of water efficiency.

Despite the success of traditional agency rebate programs, on their own these programs may not be enough to meet the aggressive efficiency standard deadlines that are fast approaching.

The Malibu and Topanga Smart project offers a new design that reaches out to, and engages, high water use customers in a unique manner. As with any pilot project, the hope is for the forecasted goals to be met, or exceeded, by the actual results. With a sound design and the hard work of many program partners, the Project the desired outcomes.

Despite the challenges of the Woolsey Fire and the COVID pandemic, the Malibu and Topanga Smart Project not only met, but overachieved, the water savings goal by 11%.

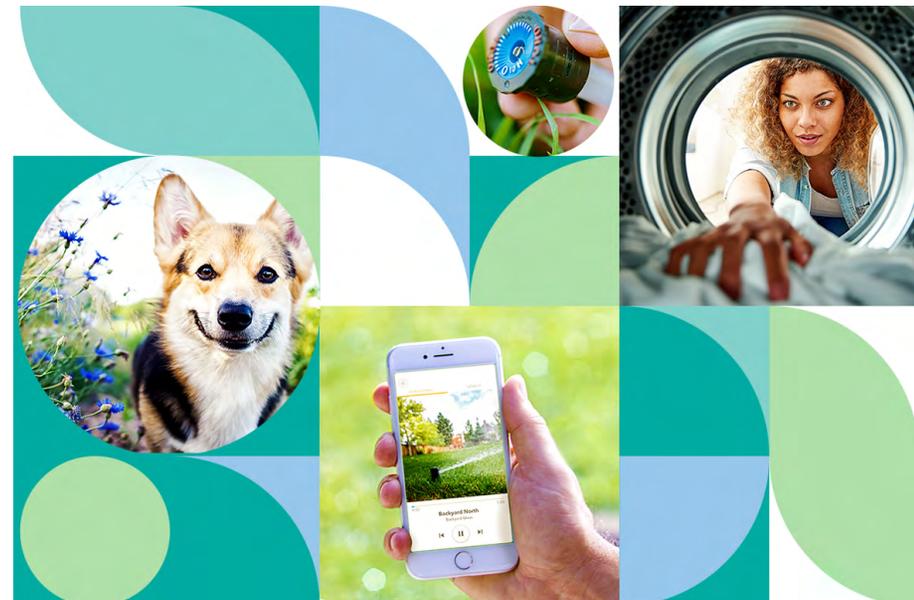
As well, through implementation of this Project, the Partners gained valuable insight that can inform future endeavors. Knowledge gained through this pilot include the following observations:

- The direct installation design is well received by customers and overcomes many barriers.
- Targeting the highest and most inefficient users of water, as expected, produced the highest water savings.
- Customers require handholding and support services throughout the retrofit process to ultimately complete projects at their properties.
- Sharing case studies boosted Project participation.
- Leveraging trusted community members as influencers also improved participation.
- Collaborations, like the Malibu and Topanga Smart Program, can deliver more meaningful water and energy savings than traditional rebate programs.



Perhaps most significantly, the Malibu and Topanga Smart Project substantiates the power of the partnership. This collective funding design allows multiple agencies to “stack” rebates, achieving a more generous overall incentive that effectively drives the market.

The collaborative format also creates the opportunity for cross promotions between agencies and a greater depth of marketing coverage. With multiple agencies, all advertising the project, there is a greatly elevated level of customer awareness and activity.



Project Partners

Multiple agencies participated in the funding, administration, and/or implementation of the project, as shown below:

City of Malibu – Lead agency

LA County Waterworks – Project partner, AMI installations, and device funding

West Basin MWD – Project partner and device funding

Metropolitan Water District – Rebate funding and rebate program administrator

LA County Flood Control District – Grant administrator

Department of Water Resources – Grant funding